



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/600,051

06/20/2003

Thomas N. Chalin

WCMI-0036

5857

20558 7590 05/01/2009  
SMITH IP SERVICES, P.C.  
P.O. Box 997  
Rockwall, TX 75087

EXAMINER

FLEMING, FAYE M

ART UNIT

PAPER NUMBER

3616

MAIL DATE

DELIVERY MODE

05/01/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/600,051	<b>Applicant(s)</b> CHALIN ET AL.	
	<b>Examiner</b> Faye M. Fleming	<b>Art Unit</b> 3616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 3,5,10-28,31-36,42,43,45,47,48,50 and 51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-9,29,30,37-41,44,46,49,52 and 53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 6-9, 29, 30, 37-41, 44, 46, 49, 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raidel, II, et al. (6,843,490) and Wallace, et al. (4,858,949) in view of Obeshaw (6,893,733).

Raidel, II teaches a suspension system for a vehicle having a frame, the suspension system comprising an axle 24; beam 54 interconnected between the vehicle frame and the axle, the beam having opposite ends, an elongated body extending between the opposite ends and a metal end connection at one of the opposite ends (see col. 3, lines 37-40). The end connection is a frame pivot connection. The suspension system has a cross-section with at least two flanges and a web extending between the flanges. The suspension system connection is a frame pivot connection. The end connection is received internally in the body. The flanges wrap outwardly about the axle end connection. The end connection is received internally in the body. As shown in figure 2, a sleeve and a body coupling structure are integrally formed wherein the sleeve encircles a bushing 118.

Raidel II teaches the claim language except for the body having an I-shaped cross section. Wallace teaches a body 54 which has an I-shaped cross-section. With respect to the I-shaped cross-section having a greater density of fiber than the web of the cross-section extending

Art Unit: 3616

between flanges, the I-shaped cross-section is thicker and inherently would have a greater density. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Raidel, II to have I-shaped body to provide a less weight on the suspension system which produces a lighter vehicle.

Raidel II and Wallace teach the claimed invention except for the body and the axle being made of a composite material. Obeshaw discloses structural members, having numerous uses (see col. 18, lines 27-30, made of a composite material including a matrix material and a reinforcement material. The reinforcement material is carbon fiber and the matrix material is epoxy resin. Further, Obeshaw teaches a modified contoured crushable structural member such as a steering column made of a composite material, however Obeshaw also teaches composite materials are used in today's vehicles to make structural members; therefore it would have been obvious to one having ordinary skill in the art at time the invention was made to modify the combination of Raidel II and Wallace to be made of a composite material to decrease the weight of the vehicle to improve fuel efficiency.

### ***Response to Arguments***

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye M. Fleming whose telephone number is (571) 272-6672. The examiner can normally be reached on M-F (9:00-5:00).

Art Unit: 3616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Faye M. Fleming/  
Primary Examiner, Art Unit 3616